

What is claims is:

1. A method of producing a vehicle roof rail by using a mold having a resin gate, an ejection gate connected to an ejection cavity, and a dam provided in a mold cavity near said resin gate, said method comprising:

filling said mold cavity with a molten polyamide resin composition containing a polyamide resin and glass fiber; and  
molding a rail portion integrally with leg portions to be mounted onto a roof.

2. The method of producing a vehicle roof rail according to claim 1 comprising:

protruding said dam used as a movable dam into said mold cavity;

filling a space of from said resin gate to said dam with said molten polyamide resin composition; and

moving said dam back from said die cavity to fill the whole space of said mold cavity with said molten polyamide resin composition.

3. The method of producing a roof rail according to claim 2 comprising:

injecting a pressurized gas into the thus packed molten polyamide resin composition through a pressurized gas injection nozzle while or after said mold cavity is filled with said molten polyamide resin composition; and

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ejecting a surplus of said molten polyamide resin composition from said ejection gate to said ejection cavity having a thickness of not smaller than 10 mm and a width being twice as large as the thickness to thereby form a hollow portion in the inside of said molten polyamide resin composition.

4. The method of producing a roof rail according to claim 3, wherein said pressurized gas injection nozzle has a pipe-like sleeve, and an axial core buried in said sleeve, and in that the gap between said pipe-like sleeve and said axial core in a narrowed state of said nozzle is not wider than 0.010 mm in a section perpendicular to a longitudinal direction of said sleeve and is not shorter than 10 mm in the longitudinal direction of said sleeve.

5. The method producing a roof rail according to claim 1, wherein said polyamide resin has a crystallization temperature of not higher than 210°C and a glass transition temperature of not higher than 70°C.

6. The method of producing a roof rail according to claim 5, wherein said polyamide resin contains a hexamethylene adipamide unit and a hexamethylene phthalamide unit.

7. The method of producing a roof rail according to claim 5, wherein a copper compound, a phosphite compound, carbon black and a copper phthalocyanine derivative are mixed with said polyamide resin.

8. The method or producing a roof rail according to claim 1, wherein said resin composition contains a polyamide resin in a range of from 35 to 75 parts by weight, glass fiber in a range of from 50 to 65 parts by weight, and an inorganic filler in a range of from 0 to 35 parts by weight, and in that the total amount of said glass fibers and said inorganic filler is in a range of from 30 to 65 parts by weight.

9. The method producing a roof rail according to claim 1, wherein said dam is movable.

10. A mold apparatus for molding a vehicle roof rail having a rail portion, and plurality of leg portions integrally molded with the rail portion, said apparatus comprising:

a mold cavity having a resin gate; and

a dam provided in said mold cavity near said resin gate.

11. The mold apparatus according to claim 10, wherein said dam is movable.

12. A mold apparatus for molding a vehicle roof rail having a rail portion, and plurality of leg portions integrally molded with the rail portion and further having a hollow portion at least in the rail portion, said apparatus comprising:

a roof rail-forming cavity having a resin ejection gate;  
and

a resin ejection cavity having a thickness of at least not smaller than 10 mm and a width of not smaller than twice the thickness and connected to said roof rail-forming cavity through said resin ejection gate.

13. A mold apparatus for molding a vehicle roof rail having a rail portion, and plurality of leg portions integrally molded with the rail portion and further having a hollow portion at least in the rail portion, said apparatus comprising:

a pressurized gas injection nozzle including a sleeve,  
and an axial core buried in the sleeve for injecting a pressurized gas to form a hollow portion;

wherein the gap between the sleeve and the axial core in a narrow state of the nozzle is not wider than 0.01 mm in a section perpendicular to a longitudinal direction of the sleeve and is not shorter than 10 mm in said longitudinal direction.